

IMB 0651-0031

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VT-1869	SERIAL NO. 09/484,799
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Barker et al.	
Sheet Page 1 of 1		FILING DATE 1/18/00	GROUP 1745

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	REF. NO.	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	LOCATION WHERE RELEVANT PASSAGES OR FIGURES APPEAR	RELEVANT FIGURES
CL		US 5721070 B1	2/24/1998	Shackle		

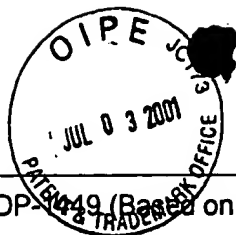
FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	REF. NO.	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	LOCATION WHERE RELEVANT PASSAGES OR FIGURES APPEAR	T

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIALS	REF. NO.	

EXAMINER <i>Carl Cheney</i>	DATE CONSIDERED <i>3-22-05</i>
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; conformance and not considered. Include copy of this form with next communication to applicant.	



FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET No.

4858-000123

SERIAL No.

09/484,799

APPLICANT

Jeremy Barker

FILING DATE

January 18, 2000

GROUP

1745

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	CL	5,871,866	2/16/99	Barker et al.	—	—
2.	CL	5,567,548	10/22/96	Walk et al.	—	—
3.	CL	5,496,663	3/5/96	Walk et al.	—	—
4.	CL	5,219,677	6/15/93	Labat et al.	—	—

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.	CL	PCT/US00/35302	5/29/01	Search Report - PCT	—		
2.	CL	EP 1 049 182 A2	11/2/00	Europe	—		X
3.	CL	JP11025983 ✓	1999-01/1999	Japan	—	X	
4.	CL	DE 40 24 409 A1 ✓	8/1/90	Germany	—		X
5.	CL	JP5299101	1994/11/1993	Japan	—	X	
6.	CL	JP11111295 ✓	1999	Japan	—	X	

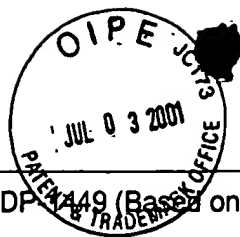
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	CL	Boutinaud et al., "The Solid Solution BaLi _{1-x} Cu _x PO ₄ ($x \leq 0.5$): An Example of Cu ⁺ Single-Ion Luminescence in Oxide Insulators"; J. Mater. Chem 1996, 6(3), pp 381-384.
2.	CL	Patent Abstracts of Japan, 11025983, 1/29/99, Japan Storage Battery Col., Ltd.
3.	CL	Patent Abstracts of Japan, 05299101, 11/12/93, Sanyo Electric Co., Ltd.

Examiner:

Date Considered: 11-19-01

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

ATTORNEY DOCKET NO.

4858-000123

SERIAL NO.

09/484,799

APPLICANT

Jeremy Barker

FILING DATE

January 18, 2000

GROUP

1745

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.						

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.							

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	<i>a</i>	Patent Abstracts of Japan, 1111295, 4/23/99, Japan Storage Battery Co., Ltd.
2.	<i>a</i>	Goni et al., "7Li and 31P Nuclear Magnetic Resonance Studies of Li _{1-3x} MgFexPO ₄ "; Journal of Applied Physics, Volume 84, Number 1, July 1, 1998, pp 416-421.
3.	<i>a</i>	Nanjundaswamy et al., "Synthesis, Redox Potential Evaluation and Electrochemical Characteristics of NASICON-Related-3D Framework Compounds"; Solid State Ionics 92 (1996) pp 1-10.
4.	<i>a</i>	Gopalakrishnan et al., "V ₂ (PO ₄) ₃ : A Novel NASICON-Type Vanadium Phosphate Synthesized by Oxidative Deintercalation of Sodium from Na ₃ V ₂ (PO ₄) ₃ "; Chemistry of Materials, Volume 4, Number 4, July/August 1992.
5.	<i>ci</i>	Martinez-Juarez et al., "Relationship Between Activation Energy and Bottleneck Size for Li ⁺ Ion Conduction in NASICON Materials of Composition LiMM'(PO ₄) ₃ ; M, M' = Ge, Ti, Sn, Hf"; J. Phys. Chem, 1998, pp 372-375.
6.	<i>a</i>	Cocciantelli et al., "On the $\delta \rightarrow \gamma$ Irreversible Transformation in Li/V ₂ O ₅ Secondary Batteries," Solid State Ionics 78 (1995) pp 143-150.
7.	<i>a</i>	Delmas et al., "The Li _x V ₂ O ₅ System: An Overview of the Structure Modifications Induced by the Lithium Intercalation"; Solid State Ionics, 69 (1994) pp 257-264.

Examiner: *Chen*

Date Considered: 11-19-01

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Duplicate

FORM HDP-1449 (Based on Form PTO-1449) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 1 of 4	ATTORNEY DOCKET No.	SERIAL No.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
	1/18/00	1745

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	CC	6,153,333	11/28/00	Barker	428/218.1	
2.	CC	5,871,866	2/16/99	Barker, et al.	429/231.1	
3.	CC	5,496,663	03/05/96	Walk, et al.	429/218	
4.	CC	5,567,548	10/22/96	Walk, et al.	429/218	
5.	CC	5,219,677	06/15/93	Labat, et al.	429/50	

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.	CC	JP 2001110414	4-20-2001	JAPAN, ENGLISH ABSTRACT PROVIDED		abstract	X
2.	CC	JP 2001110455	4-20-2001	JAPAN, ENGLISH ABSTRACT PROVIDED			X
3.		JP 5325961	12-10-1993	JAPAN, ENGLISH ABSTRACT PROVIDED			
4.	CC	JP 9134724	05-20-1997	JAPAN		X	
5.	CC	JP 2004052733	02-23-2004	JAPAN, ENGLISH ABSTRACT PROVIDED			X
6.	CC	JP11025983	01-29-1999	JAPAN, ENGLISH ABSTRACT PROVIDED			X
7.	CC	JP2001085010	03-30-2001	JAPAN		X	
8.	CC	CA 2096386	11-19-1993	CANADA			
9.	CC	EP 571858 B1	12-01-93	European Patent Office	H01M-4/58		
10.	CC	WO 200060680	10-12-00	Japan- English Abstract on Document	H01M-4/58		
11.	CC	WO 97/40541	10-30-97	WIPO	H01M-4-58	X	

Examiner: *Carol Cherny*Date Considered: *updated 3-21-05 CC*

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)

**PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION**
(Use several sheets if necessary)

Sheet 2 of 4

ATTORNEY DOCKET NO:

4858-000123

SERIAL NO.

09/474,799

APPLICANT

Barker, J.

FILING DATE

1/18/00

GROUP

1745

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
12.	CC	JP 09134725	05-20-97	Japan	H01M-4-58	X	
13.	CC	JP 09171827	06-30-97	Japan	H01M-4/02	X	
14.	CC	JP 2000294238	10-20-00	Japan	H01M-4/02	X	
15.	CC	JP 08171938	07-02-96	Japan	H01M-10/40	X	
16.	CC	WO 9512900	05-11-95	WIPO English Abstract on Document	H01M-4-02	X	
17.	CC	DE 40 244 09 A1	02-06-92	Germany/English Abstract Provided	C01G-51/00		X
18.	CC	CA 2,200,998	09-25-98	Canada	H01M-4/24	X	
19.	CC	EP 1 049 182 A2	11-2-00	European Patent Office English Abstract	H01M-4/58	abstract	X
20.	CC	JP 52999101	11-12-93	Japan/English Abstract Provided	H01M-6/18		X
21.	CC	JP 11111295	04-23-99	European Patent Office English Abstract Provided	H01M-4/58		X

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	CC	Lutsko, V., Ion exchange and sorption processes as methods of synthesis of double phosphates and intercalated compounds, (1990), Phosphorus, Sulfur Silicon Relat. Elem., 51-52 (1-4), pp. 97-100, ABSTRACT PROVIDED.
2.	CC	Butt, G., et al., Lithium metal phosphate cathodes for Li Secondary batteries, (1998), J. Australas. Ceram. Soc., 34(1), pp. 60-65, ABSTRACT PROVIDED.

update 3-21-05

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 3 of 4	ATTORNEY DOCKET NO.	SERIAL NO.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
	1/18/00	1745

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
3.	cc	Andersson, A., et al., Thermal stability of LiFePO ₄ – based cathodes, (2000), Electrochem. Solid-State Lett., 3(2), pp. 66-68, ABSTRACT PROVIDED.
4.	cc	Garcia-Alvarado, F., et al., Structural and electrochemical characterization of electrode materials for lithium rechargeable batteries, (2000) Bol. Soc. Esp. Ceram. Vidrio, 39(3), pp. 239-243, ABSTRACT PROVIDED.
5.	cc	Amine, K., et al., Olivine LiCoPO ₄ as 4.8 V electrode material for lithium batteries, (2000); Electrochem. Solid-State Lett. 3(4), pp. 178-179, ABSTRACT PROVIDED.
6.	cc	Best, A., et al., The effect of additives on ceramic materials for lithium solid electrolytes (1998), J. Australas. Ceram. Soc., 34(1), pp. 236-241.
7.	cc	Okada, S., et al., Cathodes properties of phospho-olivines for lithium secondary batteries, (2000), 14(2), pp. 133-137, ABSTRACT PROVIDED.
8.	cc	Amine, K., et al., Olivine LiMePO ₄ (Me: Co, Cu) as 4.8 V and 2 V positive electrode materials for lithium batteries, (2000), 14(2), pp. 133-137, ABSTRACT PROVIDED.
9.	cc	Padhi, A.K., et al., Phospho-Olivines as positive-electrode materials for rechargeable lithium batteries, (1997) J. Electrochem. Soc., 144(4), 1188-1194.
10.	cc	Padhi, A.K., et al., Effect of Structure on the Fe ³⁺ /Fe ²⁺ redox couple in Fe phosphates, (1997) J. Electrochem. Soc. 144(5), 1609-1613
11.	✓cc	Andersson, et al., Lithium extraction/insertion in LiFePO ₄ : an x-ray diffraction and Mossbauer spectroscopy study, (2000), Solid State Ionics, 130 (1,2), 41-52
12.	cc	Boutinaud, P., et al., The solid solution BaLi _{1-x} Cu _x PO ₄ (x<0.5): an example of Cu ⁺ single-ion luminescence in oxide insulators, (1996) J. Mater. Chem., 1996 6(3), 381-384
13.	cc	Vaknin, et al., Weakly (x=0) and randomly (x=0.033) coupled using antiferromagnetic planes in (Li _{1-3x} Fe _x) NiPO ₄ compounds, (1999) Phys. Rev. B: Condens. Matter. Mater. Phys. 60(2), 1100-1110
14.	cc	Goni, et al., ⁷ Li and ³¹ P nuclear magnetic resonance studies of Li _{1-3x} Mg _x Fe _x PO ₄ , (1998), Journal of Applied Physics, Vol. 84 No. 1
15.	cc	J.M. Cocciantelli, et al., On the irreversible transformation in Li/Ni ₂ O ₆ secondary batteries, Solid State Ionics, 78 (1995) 143-150

updates 3-21-05 cc

Examiner: <i>Chris Ch...</i>	Date Considered:
------------------------------	------------------

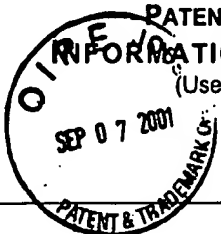
EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 4 of 4	ATTORNEY DOCKET NO.	SERIAL NO.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
1/18/00	1745	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
16.	<i>u</i>	C. Delmas, et al., The $\text{Li}_x\text{V}_2\text{O}_5$ system: An overview of the structure modifications induced by the lithium intercalation, (1994) Solid State Ionics 69, 257-264
17.	<i>u</i>	Martinez-Juarez, et al., Relationship between Activation Energy and Bottleneck Size for Li+Ion Conduction in NASICON Materials of Composition $\text{LiMM}'(\text{PO}_4)_3$; M,M' = Ge,Ti, Sn, Hf, J. Phys. Chem, B 1998, 102, 372-375
18.	<i>u</i>	J. Gopalakrishnan, et al., $\text{V}_2(\text{PO}_4)_3$: A Novel NASICON Type Vanadium Phosphate Synthesized by Oxidative Deintercalation of Sodium from $\text{Na}_3\text{V}_2(\text{PO}_4)_3$, (1992) Chemistry of Materials, Volume 4, Number 4
19.	<i>u</i>	K.S. Nanjundaswamy, Synthesis, redox potential evaluation and electrochemical characteristics of NASICON – related-3D framework compounds, Solid State Ionics 92 (1996) 1-10
20.	<i>u</i>	International Search Report PCT/US 00/35302; PCT Search Authority

Examiner: <i>[Signature]</i>	Date Considered: <i>update 3-21-05 u</i>
------------------------------	--

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
		4858-000123	09/474,799
		APPLICANT	
		Barker, J.	
Sheet 1 of 4		FILING DATE	GROUP
		1/18/00	1745

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	CL	6,153,333 <i>new</i>	11/28/00	Barker	428/218.1	
2.	CL	5,871,866	2/16/99	Barker, et al.	429/231.1	
3.	CL	5,496,663	03/05/96	Walk, et al.	429/218	
4.	CL	5,567,548	10/22/96	Walk, et al.	429/218	
5.	CL	5,219,677	06/15/93	Labat, et al.	429/50	

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No	
1.	CL	JP 2001110414	4-20-2001	JAPAN, ENGLISH ABSTRACT PROVIDED	428/218.1		X
2.	CL	JP 2001110455	4-20-2001	JAPAN, ENGLISH ABSTRACT PROVIDED			X
3.	CL	JP 5325961	12-10-1993	JAPAN, ENGLISH ABSTRACT PROVIDED			
4.	CL	JP 9134724	05-20-1997	JAPAN		X	
5.	CL	JP 2001052733	02-23-2001	JAPAN, ENGLISH ABSTRACT PROVIDED			X
6.	CL	JP11025983	01-29-1999	JAPAN, ENGLISH ABSTRACT PROVIDED			X
7.	CL	JP2001085010	03-30-2001	JAPAN		X	
8.	CL	CA 2096386	11-19-1993	CANADA			
9.	CL	EP 571858 B1	12-01-93	European Patent Office	H01M-4/58		
10.	CL	WO 200060680	10-12-00	Japan- English Abstract on Document	H01M-4/58		
11.	CL	WO 97/40541	10-30-97	WIPO	H01M-4-58	X	

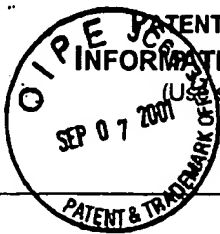
Examiner: <i>Carol Chaney</i>	Date Considered: <i>8/16/04</i>
-------------------------------	---------------------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

update 3-21-05

Duplicate

FORM HDP-1449 (Based on Form PTO-1449) U.S. PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 2 of 4	ATTORNEY DOCKET NO.	SERIAL NO.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
	1/18/00	1745



FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No	
12.	cc	✓ JP 09134725	05-20-97	Japan	H01M-4-58	X	
13.	cc	✓ JP 09171827	06-30-97	Japan	H01M-4/02	X	
14.	cc	✓ JP 2000294238	10-20-00	Japan	H01M-4/02	X	
15.	cc	✓ JP 08171938	07-02-96	Japan	H01M-10/40	X	
16.	cc	✓ WO 9512900	05-11-95	WIPO English Abstract on Document	H01M-4-02	X	
17.	considered in previous set	✓ DE 40 244 09 A1	02-06-92	Germany/English Abstract Provided	C01G-51/00		X
18.	cc	✓ CA 2,200,998	09-25-98	Canada	H01M-4/24	X	
19.	cc	✓ EP 1 049 182 A2	11-2-00	European Patent Office English Abstract	H01M-4/58		X
20.	cc	✓ JP 52999101	11-12-93	Japan/English Abstract Provided	H01M-6/18		X
21.	cc	✓ JP 11111295	04-23-99	European Patent Office English Abstract Provided	H01M-4/58		X

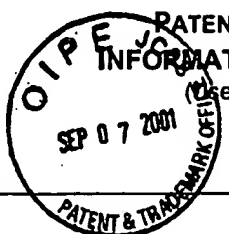
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
1.	cc	✓ Lutsko, V., Ion exchange and sorption processes as methods of synthesis of double phosphates and intercalated compounds, (1990), Phosphorus, Sulfur Silicon Relat. Elem., 51-52 (1-4), pp. 97-100, ABSTRACT PROVIDED.
2.	cc	✓ Butt, G., et al., Lithium metal phosphate cathodes for Li Secondary batteries, (1998), J. Australas. Ceram. Soc., 34(1), pp. 60-65, ABSTRACT PROVIDED.

updated 3-21-05 cc

Examiner: <i>Carol Chavez</i>	Date Considered: <i>8-16-04</i>
-------------------------------	---------------------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Duplicate

FORM HDP-1449 (Based on Form PTO-1449)  PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 3 of 4	ATTORNEY DOCKET NO.	SERIAL NO.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
1/18/00	1745	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
3.	ca	Andersson, A., et al., Thermal stability of LiFePO ₄ – based cathodes, (2000), Electrochem. Solid-State Lett., 3(2), pp. 66-68, ABSTRACT PROVIDED.
4.	ca	Garcia-Alvarado, F., et al., Structural and electrochemical characterization of electrode materials for lithium rechargeable batteries, (2000) Bol. Soc. Esp. Ceram. Vidrio, 39(3), pp. 239-243, ABSTRACT PROVIDED.
5.	ce	Amine, K., et al., Olivine LiCoPO ₄ as 4.8 V electrode material for lithium batteries, (2000), Electrochem. Solid-State Lett. 3(4), pp. 178-179, ABSTRACT PROVIDED.
6.	ca	Best, A., et al., The effect of additives on ceramic materials for lithium solid electrolytes (1998), J. Australas. Ceram. Soc., 34(1), pp. 236-241.
7.	ca	Okada, S., et al., Cathodes properties of phospho-olivines for lithium secondary batteries, (2000), 14(2), pp. 133-137, ABSTRACT PROVIDED.
8.	ca	Amine, K., et al., Olivine LiMePO ₄ (Me: Co, Cu) as 4.8 V and 2 V positive electrode materials for lithium batteries, (2000), 14(2), pp. 133-137, ABSTRACT PROVIDED.
9.	ca	Padhi, A.K., et al., Phospho-Olivines as positive-electrode materials for rechargeable lithium batteries, (1997) J. Electrochem. Soc., 144(4), 1188-1194.
10.	ca	Padhi, A.K., et al., Effect of Structure on the Fe ³⁺ /Fe ²⁺ redox couple in Fe phosphates, (1997) J. Electrochem. Soc. 144(5), 1609-1613
11.	ca	Andersson, et al., Lithium extraction/insertion in LiFePO ₄ : an x-ray diffraction and Mossbauer spectroscopy study, (2000), Solid State Ionics, 130 (1,2), 41-52
12.	ca	Boutinaud, P., et al., The solid solution BaLi _{1-x} Cu _x PO ₄ (x<0.5): an example of Cu+single-ion luminescence in oxide insulators, (1996) J. Mater. Chem., 1996 6(3), 381-384
13.	ca	Vaknin, et al., Weakly (x=0) and randomly (x=0.033) coupled using antiferromagnetic planes in (Li _{1-3x} Fex) NiPO ₄ compounds, (1999) Phys. Rev. B: Condens. Matter. Mater. Phys. 60(2), 1100-1110
14.	ca	Goni, et al., ⁷ Li and ³¹ P nuclear magnetic resonance studies of Li _{1-3x} MgFexPO ₄ , (1998), Journal of Applied Physics, Vol. 84 No. 1
15.	ca	J.M. Cocciantelli, et al., On the irreversible transformation in Li/V ₂ O ₅ secondary batteries, Solid State Ionics, 78 (1995) 143-150

Examiner: Carol Channon	Date Considered: 8-16-04
-------------------------	--------------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

updated 3-21-05
ca

Duplicate

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET No.	SERIAL No.
PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) SEP 07 2001 Sheet 4 of 4		4858-000123	09/474,799
		APPLICANT	
		Barker, J.	
		FILING DATE	GROUP
		1/18/00	1745

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
16.	<i>cl</i>	C. Delmas, et al., The $\text{Li}_x\text{V}_2\text{O}_5$ system: An overview of the structure modifications induced by the lithium intercalation, (1994) Solid State Ionics 69, 257-264
17.	<i>a</i>	Martinez-Juarez, et al., Relationship between Activation Energy and Bottleneck Size for Li^+ -Ion Conduction in NASICON Materials of Composition $\text{LiMM}'(\text{PO}_4)_3$; $\text{M}, \text{M}' = \text{Ge}, \text{Ti}, \text{Sn}, \text{Hf}$, J. Phys. Chem, B 1998, 102, 372-375
18.	<i>a</i>	J. Gopalakrishnan, et al., $\text{V}_2(\text{PO}_4)_3$: A Novel NASICON Type Vanadium Phosphate Synthesized by Oxidative Deintercalation of Sodium from $\text{Na}_3\text{V}_2(\text{PO}_4)_3$, (1992) Chemistry of Materials, Volume 4, Number 4
19.	<i>a</i>	K.S. Nanjundaswamy, Synthesis, redox potential evaluation and electrochemical characteristics of NASICON – related-3D framework compounds, Solid State Ionics 92 (1996) 1-10
20.	<i>a</i>	International Search Report PCT/US 00/35302; PCT Search Authority

*up dated
3-21-05*

Examiner: <i>Carol Channing</i>	Date Considered: <i>8-16-04</i>
---------------------------------	---------------------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

APPENDIX B

September 7, 2001 Form PTO-1449 printed from
PAIR on-line system

FORM HDP-1449 (Based on Form PTO-1449) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 1 of 1	ATTORNEY DOCKET NO.	SERIAL NO.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
	1/18/00	1745

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.						

FOREIGN PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No
1.	OK	DE 40 244 09 A1	02-06-92	Germany	C01G-51/00	YES

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
1.	OK	Butt, G., et al., Lithium metal phosphate cathodes for Li Secondary batteries, (1998), J. Australas. Ceram. Soc., 34(1), pp. 60-65
2.	OK	Andersson, A., et al., Thermal stability of LiFePO ₄ – based cathodes, (2000), Electrochem. Solid-State Lett., 3(2), pp. 66-68
3.	OK	Amine, K., et al., Olivine LiCoPO ₄ as 4.8 V electrode material for lithium batteries, (2000), Electrochem. Solid-State Lett. 3(4), pp. 178-179
4.	OK	Amine, K., et al., Olivine LiMePO ₄ (Me: Co, Cu) as 4.8 V and 2 V positive electrode materials for lithium batteries, (2000), 14(2), pp. Electrochem. Soc. 311-325
5.	?	Garcia-Alvarado, F., et al., Structural and electrochemical characterization of electrode materials for lithium rechargeable batteries, (2000) Bol. Soc. Esp. Ceram. Vidrio, 39(3), pp. 239-243 (not in English)
6.	OK	Lutsko, V., Ion exchange and sorption processes as methods of synthesis of double phosphates and intercalated compounds, (1990), Phosphorus, Sulfur Silicon Relat. Elem., 51-52 (1-4), pp. 97-100
7.	OK	Okada, S., et al., Cathodes Properties of Phospho-olivine for Lithium Secondary Batteries, The Reports of Institute of Advanced Material Study, Kyushu University, Vol. 14, No.2 (2000)

Examiner: <i>Carli Ch...</i>	Date Considered: <i>3-21-05</i>
------------------------------	---------------------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

LIST OF REFERENCES CITED BY APPLICANT

ATTY. DOCKET NO.
VT-1869SERIAL NO.
09/484,799APPLICANT
Jeremy Barker and M. Yazid SaidiFILING DATE
January 18, 2000GROUP
1745

U. S. PATENT DOCUMENT

EXAMINER INITIALS		PATENT NO.	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE
ca	AA	5,910,382	6-8-99	Goodenough et al.	1	1	
	AB	5,871,866	2-16-99	Barker et al.	1	1	
	AC	5,514,490	5-7-96	Chen et al.	1	1	
	AD	5,296,436	3-22-94	Bortinger	1	1	
	AE	5,262,548	11-16-93	Barone	1	1	
	AF	5,232,794	8-3-93	Krumpelt et al.	1	1	
	AG	4,985,317	1-15-91	Adachi et al.	1	1	
	AH	4,707,422	11-17-87	deNeufville et al.	1	1	
	AI	4,690,877	9-1-87	Gabano et al.	1	1	
	AJ	4,683,181	7-28-87	Armand et al.	1	1	
	AK	4,512,905	4-23-85	Clearfield et al.	1	1	

FOREIGN PATENT OR PUBLISHED PATENT APPLICATION

		DOCUMENT NO.	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION
ca	AL	EP O 680 106 A1	11-2-95	EPO			Yes
ca	AM	JP-61-263069	11/1986	Mizuno-IPX			Yes

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

ca	AN	International Search Report for PCT/US97/15544
	AO	Xangan et al., "New Titanium-Vanadium Phosphates of Nasicon and Langbeinite Structures, and Differences Between the Two Structures Toward Deintercalation of Alkali Metal," <i>JOURNAL OF SOLID STATE CHEMISTRY</i> , 109, (1994) pp 116-121.
	AP	Delmas et al., "The Nasicon-Type Titanium Phosphates $ATi_2(PO_4)_3$ (A = Li, Na) as Electrode Materials," <i>SOLID STATE IONICS</i> (1988) 28-30 pp 419-423
	AQ	Hagenmuller et al., "Intercalation in 3D-Skeleton Structures: Ionic and Electronic Features," <i>MATERIAL RESOURCES SOCIETY SYMPOSIUM PROC.</i> , Vol. 210 (1991) pp 323-334.
	AR	Chem. Abstrs. Svs., (1997), XP 2048304
	AS	Padhi et al., "Lithium Intercalation into NASICON-Type Mixed Phosphates: ... and $Li_2FeTi(PO_4)_3$; 37 th Power Sources Conference; Cherry Hill, New Jersey, Conference Date: June 17-20, 1996, published October 15, 1996

EXAMINER



DATE CONSIDERED

11-17-01

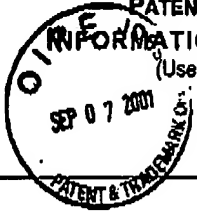
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not considered. Include a copy of this form with next communication to applicant.

RECEIVED
APR 2 2000
TC 1700 MAIL ROOM

APPENDIX C

October 11, 2001 Form PTO-1449

Duplicate

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL No.
PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)  Sheet 1 of 4		4858-000123	09/474,799
		APPLICANT	
		Barker, J.	
		FILING DATE	GROUP
		1/18/00	1745

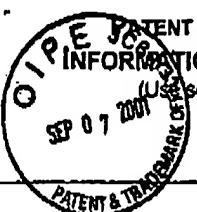
U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		6,153,333	11/28/00	Barker	428/218.1	
2.		5,871,866	2/16/99	Barker, et al.	429/231.1	
3.		5,496,663	03/05/96	Walk, et al.	429/218	
4.		5,567,548	10/22/96	Walk, et al.	429/218	
5.		5,219,677	06/15/93	Labat, et al.	429/50	

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.		✓ JP 2001110414	4-20-2001	JAPAN, ENGLISH ABSTRACT PROVIDED			X
2.		✓ JP 2001110455	4-20-2001	JAPAN, ENGLISH ABSTRACT PROVIDED			X
3.		✓ JP 5325961	12-10-1993	JAPAN, ENGLISH ABSTRACT PROVIDED			
4.		✓ JP 9134724	05-20-1997	JAPAN		X	
5.		✓ JP 2001052733	02-23-2001	JAPAN, ENGLISH ABSTRACT PROVIDED			X
6.		✓ JP11025983	01-29-1999	JAPAN, ENGLISH ABSTRACT PROVIDED			X
7.		✓ JP2001085010	03-30-2001	JAPAN		X	
8.		✓ CA 2096386	11-19-1993	CANADA			
9.		✓ EP 571858 B1	12-01-93	European Patent Office	H01M-4/58		
10.		✓ WO 200060680	10-12-00	Japan- English Abstract on Document	H01M-4/58		
11.		✓ WO 97/40541	10-30-97	WIPO	H01M-4-58	X	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Duplicate

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
 PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		4858-000123	09/474,799
		APPLICANT	
		Barker, J.	
Sheet 2 of 4		FILING DATE	GROUP
		1/18/00	1745


FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
12.		✓ JP 09134725	05-20-97	Japan	H01M-4-58	X	
13.		✓ JP 09171827	06-30-97	Japan	H01M-4/02	X	
14.		✓ JP 2000294238	10-20-00	Japan	H01M-4/02	X	
15.		✓ JP 08171938	07-02-96	Japan	H01M-10/40	X	
16.		✓ WO 9512900	05-11-95	WIPO English Abstract on Document	H01M-4-02	X	
17.		✓ DE 40 244 09 A1	02-06-92	Germany/English Abstract Provided	C01G-51/00		X
18.		✓ CA 2,200,998	09-25-98	Canada	H01M-4/24	X	
19.		✓ EP 1 049 182 A2	11-2-00	European Patent Office English Abstract	H01M-4/58		X
20.		✓ JP 52999101	11-12-93	Japan/English Abstract Provided	H01M-6/18		X
21.		✓ JP 11111295	04-23-99	European Patent Office English Abstract Provided	H01M-4/58		X

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
1.		✓ Lutsko, V., Ion exchange and sorption processes as methods of synthesis of double phosphates and intercalated compounds, (1990), Phosphorus, Sulfur Silicon Relat. Elem., 51-52 (1-4), pp. 97-100, ABSTRACT PROVIDED.
2.		✓ Butt, G., et al., Lithium metal phosphate cathodes for Li Secondary batteries, (1998), J. Australas. Ceram. Soc., 34(1), pp. 60-65, ABSTRACT PROVIDED.

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Duplicate

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
 PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		4858-000123	09/474,799
		APPLICANT	
		Barker, J.	
Sheet 3 of 4		FILING DATE	GROUP
		1/18/00	1745

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
3.		Andersson, A., et al., Thermal stability of LiFePO_4 - based cathodes, (2000), Electrochem. Solid-State Lett., 3(2), pp. 66-68, ABSTRACT PROVIDED.
4.		Garcia-Alvarado, F., et al., Structural and electrochemical characterization of electrode materials for lithium rechargeable batteries, (2000) Bol. Soc. Esp. Ceram. Vidrio, 39(3), pp. 239-243, ABSTRACT PROVIDED.
5.		Amine, K., et al., Olivine LiCoPO_4 as 4.8 V electrode material for lithium batteries, (2000), Electrochem. Solid-State Lett. 3(4), pp. 178-179, ABSTRACT PROVIDED.
6.		Best, A., et al., The effect of additives on ceramic materials for lithium solid electrolytes (1998), J. Australas. Ceram. Soc., 34(1), pp. 236-241.
7.		Okada, S., et al., Cathodes properties of phospho-olivines for lithium secondary batteries, (2000), 14(2), pp. 133-137, ABSTRACT PROVIDED.
8.		Amine, K., et al., Olivine LiMePO_4 (Me: Co, Cu) as 4.8 V and 2 V positive electrode materials for lithium batteries, (2000), 14(2), pp. 133-137, ABSTRACT PROVIDED.
9.		Padhi, A.K, et al., Phospho-Olivines as positive-electrode materials for rechargeable lithium batteries, (1997) J. Electrochem. Soc., 144(4), 1188-1194.
10.		Padhi, A.K., et al., Effect of Structure on the $\text{Fe}^{3+}/\text{Fe}^{2+}$ redox couple in Fe phosphates, (1997) J. Electrochem. Soc. 144(5), 1609-1613
11.		Andersson, et al., Lithium extraction/insertion in LiFePO_4 : an x-ray diffraction and Mossbauer spectroscopy study, (2000), Solid State Ionics, 130 (1,2), 41-52
12.		Boutinaud, P., et al., The solid solution $\text{BaLi}_{1-x}\text{Cu}_x\text{PO}_4$ ($x < 0.5$): an example of Cu^{+} single-ion luminescence in oxide insulators, (1996) J. Mater. Chem., 1996 6(3), 381-384
13.		Vaknin, et al., Weakly ($x=0$) and randomly ($x=0.033$) coupled using antiferromagnetic planes in $(\text{Li}_{1-3x}\text{Fe}_x)\text{NiPO}_4$ compounds, (1999) Phys. Rev. B: Condens. Matter. Mater. Phys. 60(2), 1100-1110
14.		Goni, et al., ^7Li and ^{31}P nuclear magnetic resonance studies of $\text{Li}_{1-3x}\text{MgFe}_x\text{PO}_4$, (1998), Journal of Applied Physics, Vol. 84 No. 1
15.		J.M. Cocciantelli, et al., On the irreversible transformation in $\text{Li}/\text{V}_2\text{O}_5$ secondary batteries, Solid State Ionics, 78 (1995) 143-150

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Duplicate

FORM HDP-1449 (Based on Form PTO-1449) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) SEP 07 2001 PATENT & TRADEMARK OFFICE Sheet 4 of 4	ATTORNEY DOCKET NO.	SERIAL NO.
	4858-000123	09/474,799
	APPLICANT	
	Barker, J.	
	FILING DATE	GROUP
1/18/00	1745	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
16.		C. Delmas, et al., The $\text{Li}_x\text{V}_2\text{O}_5$ system: An overview of the structure modifications induced by the lithium intercalation, (1994) Solid State Ionics 69, 257-264
17.		Martinez-Juarez, et al., Relationship between Activation Energy and Bottleneck Size for Li-ion Conduction in NASICON Materials of Composition $\text{LiMM}'(\text{PO}_4)_3$; M, M' = Ge, Ti, Sn, Hf, J. Phys. Chem, B 1998, 102, 372-375
18.		J. Gopalakrishnan, et al., $\text{V}_2(\text{PO}_4)_3$: A Novel NASICON Type Vanadium Phosphate Synthesized by Oxidative Deintercalation of Sodium from $\text{Na}_3\text{V}_2(\text{PO}_4)_3$, (1992) Chemistry of Materials, Volume 4, Number 4
19.		K.S. Nanjundaswamy, Synthesis, redox potential evaluation and electrochemical characteristics of NASICON - related-3D framework compounds, Solid State Ionics 92 (1996) 1-10
20.		International Search Report PCT/US 00/35302; PCT Search Authority

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.